

# Problem-Solving Teletherapy (PST) for Adults with Visual Impairment: A Feasibility Study to Improve Access and Treatment

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## INTRODUCTION

**21 million** adults in the United States have some problem that negatively affects their vision (Center for Disease Control, 2009)

Pennsylvania has the 3<sup>rd</sup> highest number of people with a visual disability (National Federation of the Blind, 2019)



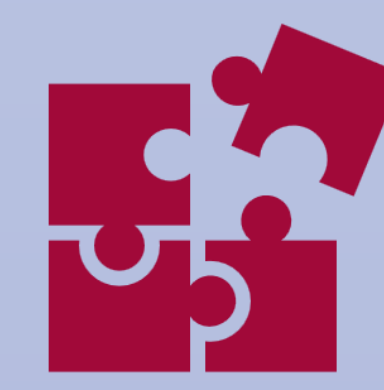
Visual impairment (VI) has been found to be in the **top ten disabilities** for adults (Center for Disease Control, 2009)

**Depression** is the most common comorbid mental health condition that individuals with visual impairment face (Court et al., 2014)



**~1/3** of adults with VI and depression or anxiety **did not receive services**, although **more than half** of them were in need (Van der Aa et al., 2015)

Research is limited on individuals with VI and how they change or improve throughout treatment



PST is **as effective** as **psychiatry** and other forms of **psychotherapy** at reducing symptoms of **depression** (Bell & D'Zurilla, 2009; Nezu et al., 2013)

**The purpose of the study is to explore the impact of a problem-solving therapy group treatment on adults with visual impairment.**

## DISCUSSION

- Assuming that our hypotheses are correct, this treatment protocol **could inform how to decrease barriers to treatment** for adults with visual impairment.
- Additionally, this study could contribute to the **limited literature about evidence-based treatment** options for the visually impaired population.
- If our hypotheses are not correct and attendance is unchanged from the control group, that would mean that **something else is influencing attendance to treatment** and that should be explored in future research opportunities.
- This study, being a **feasibility study**, has **limits with sample size and generalizability**. However, we hope that this can pave the way for **future researchers** to replicate results on a larger scale.

## HYPOTHESES

- H1:** The intervention will lead to an increase in attendance for adults with visual impairment, as compared to the control group.
  - Attendance:** the percent of sessions attended per participant as compared to a previous group treatment with this population (Mullins, 2019)
- H2:** Problem-solving skills and self-reported quality of life for adults with visual impairment will improve from pre- to post-test.
  - Problem-solving skills:** Social Problem-Solving Inventory-Revised (D'Zurilla et al., 2002)
  - Quality of life:** Quality Of Life Inventory (Frisch, 1994)
- H3:** Depressive symptoms and frequency of cognitive distortions will reduce from pre- to post-test.
  - Depression:** Patient Health Questionnaire-9 (Kroenke et al., 2001).
  - Cognitive distortions:** Inventory of Cognitive Distortions (ICD) (Yurica, 2002)

## PROPOSED METHODS

- The study will be a **single subject, multiple-baseline design** observed across group participants.
- Participants will be **adults 18-65 years** and currently **receiving services from a non-profit organization geared towards assisting adults with VI** in a northeastern US city.
- Treatment occurs over **7 weekly virtual sessions** (two-hours each) by the RI through a HIPAA compliant virtual platform.
- Treatment consists of a **PST protocol** initially adapted by Mullins (2019) for adults with VI, further revised by this RI to adapt to teletherapy platform.
- Research assistants will conduct the pre- and post- test measures during **semi-structured interviews** approximately two weeks before and after the treatment sessions.

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## PROPOSED ANALYSES

- Data will be subject to **visual inspection** to make judgments about whether and to what extent the treatment had on our outcomes.
- Descriptive statistics** will be used to characterize the study sample, including means, standard deviations, frequencies, and percentages.